

# ALFRED DEMIRJIAN

## Experience Summary

Following a groundbreaking computer forensics engagement performed for NASA, Mr. Demirjian was inspired to create a company which protects vital U.S. Government and corporate cyber assets from unauthorized disclosure, alteration, and inaccessibility. Since its founding over three decades ago, Techfusion has continued to remain at the forefront of cyber security technique development through significant research investment into experimental forensic imaging, evidence preservation, and erasure verification techniques.

- Techfusion's research contributions to the cyber security community include inventing a technique to recover data from Hard Disk Drives that have had their data storage platters physically damaged through deliberate warping, such as by using a tweezer-like instruments to bend individual platters out of shape. Techfusion also invented a technique to identify remaining data on Solid State Disks following erasure operations.
- Techfusion's U.S. Federal Government clients are wide-ranging and include the U.S. Army, the National Aeronautics and Space Administration, and the Federal Bureau of Investigation. U.S. Political Parties, such as the Republican Party and Democratic Party, regularly seek our services in ensuring the cyber security of political campaign activities. Our broad U.S. State Government clients have included entities affiliated with the States of Massachusetts, New York, and Connecticut. Our U.S. based global corporate clients include such companies as FedEx, UPS, and IBM. Other U.S. based clients range from Liberty Mutual Insurance through to Harvard University.
- Techfusion is a Corporate Partner of the US Department of Homeland Security Stop Think Connect Cybersecurity Initiative, a Corporate Member of the National Defense Industry Association Cyber Division, and an Amazon Web Services Public Sector Partner. Techfusion employees hold membership in associations such as the US Secret Service Electronic Crimes Task Force.
- Techfusion's work has been covered by leading publications such as CSO Magazine, CFO Magazine, the Boston Business Journal, and the Boston Globe newspaper. Media reprints are available on the Techfusion website, the address of which is listed below.

## Education

Mr. Demirjian's academic qualifications include a Bachelor of Science, 1984, and a Master of Science, 1985, both in Electrical Engineering from Boston University. He is a Member of the Institute of Electrical and Electronics Engineers and National Defense Industry Association.

## Skills

Mr. Demirjian has over 30 years of expertise in the field of information security and data forensics, particularly data recovery. He has expertise extending to all makes of laptop and desktop computers, solid-state drives, and hard-disk drives and a wide variety of other devices, including Apple and Android cell phones, tablets, and all forms of removable media.

His technical aptitude in the field of data forensics spans a variety of technologies, from computers to mobile devices and operating systems, to identify and respond to security breaches and network hacks.

**Techfusion Corporation**  
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Belmont MA 02478  
aa@techfusion.com; 617.491.1001  
www.techfusion.com

## ALFRED DEMIRJIAN

Mr. Demirjian uses his attention to detail in carefully sorting through significant amounts of data to uncover digital evidence that others would not notice. He deploys his exceptional analytical skills to analyze evidence, observe situations closely, notice patterns and discrepancies and interpret data. Most importantly, he has the communication skills required to convey esoteric technical information clearly and concisely to individuals with varying degrees of technical expertise. He has been called upon by Fortune 500 clients and government agencies as a seasoned executive with extensive operational, financial and technical knowledge in the areas of data recovery, computer forensics and software development.

### Publications Authored in the Last Ten Years

None.

### Cases in which I Testified as an Expert in the previous 4 years

*Christopher Castagna and Gavin Castagna v. Daran Edwards, Anthony Troy, Jay Tully, Kamau Pritchard, Michael Bizzozero, Keith Kaplan, Harry Jean and James Doe, Individually*, Civil Action No. 15-cv-14208-IT (D. Mass)

*Thanh C. Tran v. Liberty Mutual Group, et al.*, Civil Action No. 1784-cv-1380 (Suffolk Superior Court)

*Commonwealth v. Nelson Abdala* (Hampden Superior Court) - Docket No. 1579 cr 00820

*Commonwealth v. Steven Webster*, Barnstable Superior Court Docket No. 1372 cr 00035

*Gerald Alston v. Town of Brookline, Massachusetts et. al.*, Civil Action No.1:15-CV-13987-GAO (D. Mass) (listed as an expert witness but did not testify).



Average for forensic work: 4-6 weeks

**Discovering Digital Secrets****Forensic Rate Form**

**1. Project and Management Fees:** All forensic clients will be assessed a New Case fee upon the completion of the initial meeting. During this meeting, the client and case manager will discuss the specific goals and scope of the case to determine an appropriate retainer level. The project retainer serves as the deposit required to begin work on your case, and will apply to the total cost of the investigation. The retainer must be paid in full before work can proceed.

a. New Case Consultation Fee	\$450
b. Project Retainer: Computer (30hr/ \$250/hr)	\$7500
c. Project Retainer: Mobile Device * (up to 128GB of memory)	\$3500 and up
d. E-mails: iCloud, Google Drive, etc.	\$2500 - \$3500
e. Case Management (cases over 10k)	10% of total costs

**2. Consultation and Technical Fees:** Client shall be provided with an initial estimate of the hours required for each item. However, as each case is unique, hours may be more or less depending on case complexity.

a. Forensic Consultation (Engagement Managers)	\$350/Hour
b. Digital Forensic Investigator	\$250/Hour
c. Machine Hours	\$150/Hour
d. Weekend / Nights (Nights 6pm to 6am)	\$500/Hour
e. Emergency (charged at the Weekend rate)	\$500/Hour
f. CEO Oversight, Management, and Consultation Rate	\$650/Hour

**3. Imaging Services:** Imaging services are offered a la carte, or as part of a larger case. Client shall be provided with an initial estimate of each service based upon device specifications. Please note that each image requires an appropriately sized target media source, necessitating an additional hardware cost described in section 4.

a. Forensic Imaging-1 TB or less	\$1000/Item + Hardware Fee
b. Forensic Imaging- Greater than 1 TB	\$1500/Item + Hardware Fee
c. Forensic Imaging- Mobile Device	\$750/Item + Hardware Fee
d. Forensic Imaging- Small Media (Flash Drives, SD Cards, etc.)	\$100/Item + Hardware Fee

**4. Hardware Fees:** Hardware fees cover the costs of all media storage devices needed to complete your case, as well as any proprietary hardware or adapters unique to your devices. These fees apply to those needed for case work and for presentation of deliverables.

a. Hard Disk Drive (HDD)- 1 TB or less	\$75/Item
b. Hard Disk Drive (HDD) – Greater than 1 TB	\$150/Item
c. Flash Media (Flash Drive, SD Card, etc)	\$40/item
d. RAID Controlled Devices – Large Media	As Quoted
e. Additional Copies of Deliverables	\$20/Copy

**5. Certified Media Decommissioning or Destruction:** Decommissioning services are offered a la carte or as part of a larger case. Client shall be provided with an estimate of these services if applicable to the case, or if requested.

a. Hard Drives (1-10)	\$500/Item
b. Hard Drives (Greater than 10)	\$350/Item
c. Small Media Devices (Cell Phones, Flash Drives, SD Cards, etc)	\$100/Item
d. Video Documentation	\$50/Item



Boston, MA  
New York, NY

## Discovering Digital Secrets

## Forensic Rate Form

<b>6. Evidence Storage:</b> Evidence storage is provided as a complimentary service for all active cases. At the completion of a case, clients are provided with a 30-day grace period to retrieve case items. After the 30-day grace period, the following fees apply to all case items.	
a. Evidence Storage- Small and Medium Items (HDD, Flash, Mobile, etc)	\$50/Item/Month
b. Evidence Storage- Large Items (Desktop Computers, Smart TVs, etc)	\$150/Item/Month
<b>7. Travel and Onsite Expenses:</b> Client shall be assessed a fee for any and all expenses incurred during travel for a specific case. Not all cases require onsite work, and shall only be charged if applicable.	
a. Travel- Mileage	US Gov't Standard Rate
b. Travel-Time (Portal to Portal)	\$160/Hour
c. Travel- Miscellaneous Expenses	As Incurred
<b>8. Deposition or Trial Testimony:</b> Expert Witness Testimony can be provided on an as needed basis. Clients anticipating the need for testimony should notify their case manager as soon as possible, preferably during the initial client meeting.	
a. Expert Witness Testimony- Half Day	\$2500
b. Expert Witness Testimony- Full Day	\$3500
c. Alfred Demirjian Hourly Rate	\$500 -\$750
<b>9. Video Authentication /Forensics - Project Retainer</b>	Minimum \$2500 -\$3500
<b>10. Audio Authentication /Forensics - Project Retainer</b>	Minimum \$2500- \$3500

\* Getting deleted content off of a mobile phone is dependent on the OS version of the device at the time of recovery attempt. If software is not available for the OS we will have to wait with no extra charge.

Reports are an extra 2 hours ( \$250/hour). Provided a week after a case is completed.

After 1 month of case completion, we will charge a weekly fee of \$75/device, if device(s) are not picked up on time.

By signing below, you agree to the above terms so the  
Forensic work may begin:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



385 Concord Ave, Suite 203  
Belmont MA 02478  
617.491.1001

## Form 1 Questionnaire

Case Number: ..... Intake Date: .....  
Client Name: ..... Phone: .....  
Company Name: ..... Email: .....

Mailing Address: ..... Billing Address: .....  
..... If applicable .....  
.....

### 1. Are you the rightful owner of the device(s) & data and do you have the authority to request forensic services on the device(s)?

Please be advised that the Commonwealth General Laws, Part IV, Title I, Chapter 266, Sections 33A and 120F provide for monetary fines and imprisonment for fraudulently obtaining these types of services. **TechFusion will not violate the law for any reason.**

- ☐ Yes, the device(s) in question belong to me.  
☐ Yes, I have the authority to request services because: .....  
☐ No

### 2. What type of case is this?

- ☐ Criminal litigation    ☐ Personal issue    ☐ Other (please specify): .....  
☐ Civil litigation    ☐ Corporate issue

### 3. Does this case involve child endangerment or threat to the safety of a minor child?

- ☐ Yes  
☐ No

### 4. Does this case involve child pornography?

- ☐ Yes  
☐ No

**\*\*Please note: Child pornography is a very serious violation of federal law which requires notification of the authorities.**

### 5. Is there a court order or protective order pertaining to the device(s) or data on the device(s)?

- ☐ Yes    If Yes, TechFusion MUST receive a copy of the order before the device can be taken into our custody.  
☐ No

### 6. Is there a pending court date for this case?

- ☐ Yes    If Yes, list date & court: .....  
☐ No

**\*\*Please Note: Any case which must be completed in less than 30 days is considered an emergency and subject to emergency rates.**



# Form 1 Questionnaire

Case Number: .....  
 Client Name: .....  
 Company Name: .....

Intake Date: .....  
 Phone: .....  
 Email: .....

## 7. What is/are the device(s) in question? Check all that apply:

- ☐ Android Phone    ☐ iPhone    ☐ Windows Phone    ☐ Other (please specify): \_\_\_\_\_  
☐ Android Tablet    ☐ iPad    ☐ Windows Tablet    \_\_\_\_\_  
                                  ☐ MacBook    ☐ Windows Laptop    \_\_\_\_\_  
                                  ☐ iMac    ☐ Windows Desktop    \_\_\_\_\_

Please list Operating System name and Version on Chain of Custody for each device separately.

Do any devices have a Fusion or hybrid drive\*?    ☐ Yes    ☐ No    \*List Fusion/hybrid on Chain of Custody

A device with a Fusion or hybrid drive has an SSD *and* a spinning hard drive

## 8. Are the device(s) or data encrypted?

- ☐ Yes    If yes, list encryption key(s) on individual Chain of Custody forms for each device separately.  
☐ No    Type of encryption:    ☐ FV2    ☐ Bitlocker    ☐ TrueCrypt    ☐ VeraCrypt    ☐ Other:

## 9. Does the device require a password/passcode/passphrase for login?

- ☐ Yes    If yes, list credentials on individual Chain of Custody forms for each device separately.  
☐ No

## 10. Does the device function properly?

- ☐ Yes  
☐ No    If No, please explain: \_\_\_\_\_

## 11. Has the device ever been damaged?

- ☐ Yes    If Yes, please list damage: \_\_\_\_\_  
☐ No

## 12. Has the device ever been exposed to liquid?

- ☐ Yes    If Yes, please give details: \_\_\_\_\_  
☐ No

## 13. Has anyone else attempted to perform forensic or data recovery services on the device(s)?

- ☐ Yes    If Yes, please give details: \_\_\_\_\_  
☐ No

## 14. What is the goal of this examination?

\_\_\_\_\_  
 \_\_\_\_\_

Client Signature: \_\_\_\_\_

Date: \_\_\_\_\_



Form 2  
**Customer Advisory**

Case Number: ..... Intake Date: .....  
Client Name: ..... Phone: .....  
Company Name: ..... Email: .....

***Please read and understand the following information regarding release of device(s) for examination:***

Please be advised that certain procedures required to retrieve and analyze data from your device(s) may void the warranty and/or render the device unusable.

Due to the nature of these procedures, we cannot guarantee that your device will remain operable.

In order for us to proceed with your case, you must absolve TechFusion, and its employees, subsidiaries, contractors, etc., of all liability resulting from these procedures.

I, ..... acknowledge by signing below that I have read and understood the Customer Advisory pertaining to my device(s), and that my device(s) may not function properly or at all once the attempt to recover and analyze the data has been completed, and agree that TechFusion et al. will not be liable for any resulting issues. Further, I am fully aware that these procedures may void the warranty on my device, and release TechFusion et al. from all liability herein. In addition, I certify that the device(s) and the data contained therein, which I have turned over to TechFusion belong to me, and that I am allowed to authorize TechFusion to proceed with my case and all that entails.

Please be advised that the Commonwealth General Laws, Part IV, Title I, Chapter 266, Sections 33A and 120F provide for monetary fines and imprisonment for fraudulently obtaining these types of services.

**TechFusion will not violate the law for any reason.**

Client Signature: ..... Date: .....



Form 3  
**Forensic Agreement**

<b>Case Number:</b> ..... <b>Client Name:</b> ..... <b>Company Name:</b> .....	<b>Intake Date:</b> ..... <b>Phone:</b> ..... <b>Email:</b> .....
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***Please read, understand, and acknowledge the following information regarding forensic examinations and preservation of evidence:***

Computer forensics is the application of preservation, examination, and analysis techniques to gather and preserve evidence from a particular computing device in a way that is suitable for presentation in a court of law. As part of your case, our team will preserve the data, examine the data, deliver the relevant data, and prepare a forensics report which contains information regarding the procedures used and the findings of the examination. This report cannot be altered.

Because of the nature of certain types of volatile data, programs that can be used to destroy data, certain types of proprietary operating systems, and some types of hardware/software interactions, there can be no guarantee that any examiner can absolutely find specific data. It is possible, although rarely, that some data may prove to be unrecoverable.

We respect the privacy of our clients, and want you to be aware that once a device is set for examination or data is specified for preservation, it is very likely that the examiner will see everything that is and has ever been on that device, including private, personal data. This may include deleted data. It is therefore critically important that you, as the client, help us narrow the scope of our examination as much as possible. This is why we ask for very specific information regarding what you're looking for. Please be advised that under some circumstances we may be required to report certain types of evidence to the authorities (such as child abuse).

The general time frame for digital forensic preservation and examinations is 30 to 90 days. While acquisition and preservation may take less time, the preparation, analysis, sorting, and delivery of the data may take considerably more time. Please understand that this is a general guideline ONLY. Some cases may take longer; some may take less time. Although you may only be looking for a limited amount of files, the examiner must still process all of the data acquired in a forensically sound manner using approved tools & methods and validated techniques. To do otherwise can result in evidence being declared inadmissible in court, spoiled, or thrown out entirely. Our examiners cannot and will not compromise the forensic process for any reason.

Regardless of the results of the examination, you will be responsible for the total cost of the examination. This includes the non-refundable retainer and any hours above what the retainer covers in order to complete the examination, as well as the necessary hardware, any applicable rush charges or emergency fees, management fees, and/or any other expenses incurred during the course of the examination. These charges will be explicitly laid out for you and discussed with you by the engagement manager. Any changes to the above terms must be made in writing and signed by both the client and a TechFusion representative.



87 Blanchard Road  
2nd Floor  
Cambridge, MA 02138  
617-491-1001

*Form 3*  
**Forensic Agreement**

**Case Number:** ..... **Intake Date:** .....  
**Client Name:** ..... **Phone:** .....  
**Company Name:** ..... **Email:** .....

Once your case is completed, TechFusion will retain your data for no longer than 30 days, unless you explicitly request that the data be retained by us for a longer period of time. Any data retained by TechFusion longer than 30 days will be subject to a monthly storage fee.

By signing below, I acknowledge that I understand and agree to these terms and conditions.

**Client Signature:** ..... **Date:** .....

**Witness Signature:** ..... **Date:** .....



Form 4  
**Non-Disclosure Agreement**

<b>Case Number:</b> ..... <b>Client Name:</b> ..... <b>Company:</b> .....	<b>Intake Date:</b> ..... <b>Phone:</b> ..... <b>Email:</b> .....
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This Nondisclosure Agreement (the "Agreement") is entered into by and between the client listed above ("Disclosing Party"), and Techfusion Corporation located at 385 Concord Ave, Suite 203, Belmont, Massachusetts, ("Receiving Party") for the purpose of preventing the unauthorized disclosure of Confidential Information as defined below. The parties agree to enter into a confidential relationship with respect to the disclosure of certain proprietary and confidential information ("Confidential Information").

**1. Definition of Confidential Information.**

The parties agree that Disclosing Party wishes to engage the services of Receiving Party for Computer Data Recovery and/or Digital Forensic services. For purposes of this Agreement, "Confidential Information" shall include all digitized information residing and contained on the computer hard drive(s) and/or electronic device(s) belonging to Disclosing Party.

**2. Exclusions from Confidential Information.**

Receiving Party's obligations under this Agreement do not extend to information that is: (a) publicly known at the time of disclosure or subsequently becomes publicly known through no fault of the Receiving Party; (b) discovered or created by the Receiving Party before disclosure by Disclosing Party; (c) learned by the Receiving Party through legitimate means other than from the Disclosing Party or Disclosing Party's representatives; or (d) is disclosed by Receiving Party with Disclosing Party's prior written approval.

**3. Obligations of Receiving Party.**

Receiving Party shall hold and maintain the Confidential Information in strictest confidence for the sole and exclusive benefit of the Disclosing Party. Receiving Party shall carefully restrict access to Confidential Information to those of its employees or contractors directly engaged in data recovery and/or digital forensics. Receiving Party shall not, without prior written approval of Disclosing Party, use for Receiving Party's own benefit, publish, copy, or otherwise disclose to others, or permit the use by others for their benefit or to the detriment of Disclosing Party, any Confidential Information.

**4. Original and Backup Copies of Confidential Information.**

The parties agree that Data Recovery and Digital Forensics include making a backup copy of the hard drive which is subject to this Agreement, to minimize damage and prevent alteration to data residing on the original hard drive. Receiving Party shall return to Disclosing Party any and all such backup copies, in addition to the original hard drive, at the conclusion of data recovery and digital forensics services.

**5. Time Periods and Full Discharge.**

At the conclusion of Data Recovery services, Receiving Party shall, if requested, give up to the Disclosing Party the original and any backups of the hard drive which is the subject of this Agreement, wherefore the terms of this Agreement shall be deemed to have been fully complied with, and neither party shall have any further rights or obligations as to one another.

**6. Relationships.**

Nothing contained in this Agreement shall be deemed to constitute either party a partner, joint venture or employee of the other party for any purpose.



*Form 4*  
**Non-Disclosure Agreement**

<b>Case Number:</b> ..... <b>Client Name:</b> ..... <b>Company Name:</b> .....	<b>Intake Date:</b> ..... <b>Phone:</b> ..... <b>Email:</b> .....
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**7. Severability.**

If a court finds any provision of this Agreement invalid or unenforceable, the remainder of this Agreement shall be interpreted so as best to effect the intent of the parties.

**8. Integration.**

This Agreement expresses the complete understanding of the parties with respect to the subject matter and supersedes all prior proposals, agreements, representations and understandings. This Agreement may not be amended except in a writing signed by both parties.

**9. Waiver.**

The failure to exercise any right provided in this Agreement shall not be a waiver of prior or subsequent rights. This Agreement and each party's obligations shall be binding on the representatives, assigns and successors of such party. Each party has signed this Agreement through its authorized representative. This Agreement and all of the provisions contained herein become null and void if a) the Disclosing Party fails to pay the Receiving Party for services rendered; and/or b) the Receiving Party is not hired to perform actual services by the Disclosing Party.

**By signing below, I certify that I have read and understood the above stipulations of the Non-Disclosure Agreement and understand that the case referenced above shall be completed in adherence to the policies outlined in this agreement.**

**Disclosing Party (Client):**

**Name:** ..... **Date:** .....

**Witness:** ..... **Date:** .....

**Receiving Party (TechFusion):**

**Name:** ..... **Date:** .....

**Witness:** ..... **Date:** .....



Form 5  
**Chain of Custody**

Case Number: ..... Intake Date: .....  
 Client Name: ..... Phone: .....  
 Company Name: ..... Email: .....

**Device Information:**

Device Type	Manufacturer	Model Number	Serial Number	Capacity

Does this device have a Fusion or hybrid drive? ☐ Yes ☐ No

**PLEASE INCLUDE USERNAME AND PASSWORD FOR PASSWORD-PROTECTED DEVICES**

<b>Username:</b>	<b>Password:</b>
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**Encryption Key:**

Type of encryption: ☐ FV2 ☐ Bitlocker ☐ TrueCrypt ☐ VeraCrypt ☐ Other: \_\_\_\_\_  
 Operating System: \_\_\_\_\_ Version: \_\_\_\_\_

**Custody Record:** Device #: \_\_\_\_\_ of #: \_\_\_\_\_

	Print Name	Sign Name	Time	Date
Relinquished by				
Received by				
Relinquished by				
Received by				
Relinquished by				
Received by				
Relinquished by				
Received by				
Relinquished by				
Received by				



Form 6  
**Search Terms**

<b>Case Number:</b>	<b>Intake Date:</b>
<b>Client Name:</b>	<b>Phone:</b>
<b>Company Name:</b>	<b>Email:</b>

In order to proceed with your case, TechFusion requires a list of search terms in order to obtain the desired data.

Please list all search terms below. Be aware that spelling, capitalization, and punctuation are very important.

Specific file names are usually excellent terms, such as "Financials\_September\_2017.xls".

Proper nouns (such as names of people or places) are usually excellent search terms, such as "Portland, OR", "J. Jones", or "Anne Marie Smith".

Additional items which make good search terms are things like specific email addresses "johnjones@gmail.com", unusual phrases or specific terms spelled in unusual ways, which are specific to the case and known to be used by a specific person, such as "see you later Ally-gator" or "<3 honeybee!", nicknames, and phone numbers.

Date Range

From:	To:
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Search terms

1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20

Additional notes: